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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,988	04/06/2006	Wolfgang Arno Winkler	870-003-202	7146
4955 7590 12/13/2007 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER FREAY, CHARLES GRANT	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 12/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/574,988

Applicant(s)

WINKLER, WOLFGANG ARNO

Examiner

Charles G. Freay

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-29 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 and 15-29 is/are allowed.
- 6) ☒ Claim(s) 31-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This office action is in response to the amendment of October 26, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: in line 6 "ring-like" should be "annular" to agree with the same feature in line 11 (or vice versa). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng in view of DE '255 and further in view of WO 99/07196 (hereafter WO '196).

Horng discloses a fan for cooling electronic components having a flat carrier frame (20), a support member connected to the frame by struts (21). An annular air flow

passage being formed between the flat carrier frame and the support member. The carrier frame is connected to the electronic component by plural elements (the multiple legs of element 40 and the bolt in Fig. 2). The support member carries a circuit plate connected to electrical leads. The circuit plate providing the drive and control of the electric motor which drives the fan wheel (31). Horng does not set forth that there is an air deflector or that the motor is electrically commutated. Horng also but does not disclose a tubular member of increasing cross section around the air flow passage. (DE '255) discloses a similar electronic component cooling fan having a bell shaped air deflector (6) at the exit of the fan. WO '196 discloses a similar cooling fan with an air deflector having a tubular member of increasing cross section (14) surrounding the air flow passage.

At the time of the invention one of ordinary skill in the art would have found it obvious to use an air deflector as set forth by (DE '255) in the Horng fan in order to direct the air to the components to be cooled in an efficient manner.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use a tubular member such as disclosed by WO '196 to direct the air at the air deflector and obtained a focused flow of air.

The examiner notes that the applicant did not challenge the examiner's official notice and therefore agrees that electrically commutated motors are prior art. At the time of the invention it would have been obvious to one of ordinary skill in the art to use such an electric motor given it's simple design.

Claims 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng in view of DE '255 and WO '196 as applied to claim 31 above, and further in view of German reference (DE 195 03 521, hereafter DE '521).

As set forth above Horng in view of DE '255 and WO '196 disclose the invention substantially as claimed but do not disclose that the leads are guided in the frame, that they pass through a hollow sheath, that there are spring latching elements or that the circuit board provide energy to the electric motor. DE '521 discloses an electronic component cooling fan having leads 16 are guided in the frame (12), that they pass through a hollow sheath (15), and that there are spring latching elements (61). Fig. 3 clearly shows that various of the support legs are of different length. The examiner gives official notice that providing energy to a cooling fan by a circuit board is well known and that at the time of the invention one of ordinary skill in the art would have found it obvious to use the circuit board as an electrical energy source as the nearest and most readily available energy source. At the time of the invention it would have been obvious to one of ordinary skill in the art to substitute the types of legs shown in DE '521 for the support elements (40) in Horng as a well known and simple means of supporting the fan on the electronic component while providing passage for the leads.

***Allowable Subject Matter***

Claims 1-13 and 15-29 are allowed.

### ***Response to Arguments***

Applicant's arguments filed October 26, 2007 have been fully considered but they are not persuasive. With regards to claim 31 the applicant argues that the claim sets forth a wall of the depression forms part of the air passthrough. The applicant asserts that this feature is not suggested by the prior art. The examiner disagrees with this argument because as shown in Figs. 2 and 3 of Horng the vertical portion of the strut (21) is in the form of a wall and the strut forms or defines the depression. The examiner notes that the term wall is a broad term and no limitation on the extent of the wall has been given. Therefore the claim limitations have been met by Horng.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

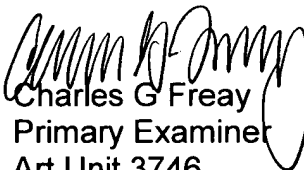
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Charles G Freay  
Primary Examiner  
Art Unit 3746

December 7, 2007